PHL 137

Critical Thinking

S3 Day 2014

Philosophy

Contents

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General Information

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Credit points
3

Prerequisites

Corequisites

Co-badged status

Unit description
This unit aims to teach the fundamentals of critical thinking and reasoning. Students learn how to construct, analyse and critically evaluate arguments; how to detect common fallacies in reasoning; and how to think logically and creatively. We teach these skills by developing practical techniques for the evaluation of reasoning, and applying them to arguments from business, law, science, politics, philosophy and the media. Critical thinking skills are invaluable across all disciplines, and will benefit students in academic contexts and in life beyond university.

Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at https://www.mq.edu.au/study/calendar-of-dates

Learning Outcomes

On successful completion of this unit, you will be able to:

Learn to recognise the structure of arguments and represent that structure in a clear, standardised form

Be able to identify different types of reasoning, such as deductive and inductive reasoning, and apply the methods of evaluation appropriate to each

Apply your critical analysis skills to real arguments from a variety of contexts by recognising the generalisability of these skills and their applicability to other disciplines

To develop critical analysis skills

To develop problem-solving skills

To develop creative thinking skills

Assessment Tasks

Name	Weighting	Due
Final Written Assignment	30%	Fri 23rd of January
Online Quiz 1	10%	Mon 21st of Dec 2014
Online Quiz 2	10%	Fri 16th of January 2015
In-Class Test	25%	Fri 19th of December
Mid-Session Assignment	25%	Mon 12th of January 2015

Final Written Assignment

Due: **Fri 23rd of January**
Weighting: **30%**

This written assignment includes a broad standardisation of a longer piece of reasoning along with a 1200-1500 word evaluation. It will include the materials from lectures 1 through to 14 of the unit with a focus on lectures 11 to 14.

On successful completion you will be able to:

- Learn to recognise the structure of arguments and represent that structure in a clear, standardised form
- Be able to identify different types of reasoning, such as deductive and inductive reasoning, and apply the methods of evaluation appropriate to each
- Apply your critical analysis skills to real arguments from a variety of contexts by recognising the generalisability of these skills and their applicability to other disciplines
- To develop critical analysis skills
- To develop problem-solving skills

- To develop creative thinking skills

Online Quiz 1

Due: **Mon 21st of Dec 2014**
Weighting: **10%**

This is an online multiple choice quiz that will test the material covered in lectures 1 through to 4.

On successful completion you will be able to:

- Be able to identify different types of reasoning, such as deductive and inductive reasoning, and apply the methods of evaluation appropriate to each
- To develop critical analysis skills
- To develop problem-solving skills

Online Quiz 2

Due: **Fri 16th of January 2015**
Weighting: **10%**

This is an online multiple choice quiz that will test the material covered in lectures 7 through to 9.

On successful completion you will be able to:

- Learn to recognise the structure of arguments and represent that structure in a clear, standardised form
- To develop critical analysis skills
- To develop problem-solving skills

In-Class Test

Due: **Fri 19th of December**
Weighting: **25%**

A test that will be taken in-class during lecture 6 and covering materials from lectures 1 through to 5.

On successful completion you will be able to:

- Learn to recognise the structure of arguments and represent that structure in a clear, standardised form
- Be able to identify different types of reasoning, such as deductive and inductive reasoning, and apply the methods of evaluation appropriate to each
- Apply your critical analysis skills to real arguments from a variety of contexts by

recognising the generalisability of these skills and their applicability to other disciplines

- To develop critical analysis skills
- To develop problem-solving skills
- To develop creative thinking skills

Mid-Session Assignment

Due: **Mon 12th of January 2015**

Weighting: **25%**

Construct an inductive argument that combines a visual image and no more than 8 words on a set topic.

On successful completion you will be able to:

- Learn to recognise the structure of arguments and represent that structure in a clear, standardised form
- Be able to identify different types of reasoning, such as deductive and inductive reasoning, and apply the methods of evaluation appropriate to each
- Apply your critical analysis skills to real arguments from a variety of contexts by recognising the generalisability of these skills and their applicability to other disciplines
- To develop critical analysis skills
- To develop problem-solving skills
- To develop creative thinking skills

Delivery and Resources

The unit will be delivered via fourteen lectures, which will include a practical component to allow the application of skills under supervision.

The unit will be supported by an iLearn website that will contain resources including, the unit text, discussion forums, self-evaluation quizzes, helpful links, lecture recordings, practice tests, and much more.

Online units can be accessed at: http://ilearn.mq.edu.au/

PC and Internet access are required. Basic computer skills (e.g., internet browsing) and skills in word processing are also a requirement.

Please consult teaching staff for any further, more specific requirements.

Unit Schedule

Lecture 1	Introduction; Why do we need critical thinking? What are arguments?
8th Dec	

Lecture 2 10th Dec	Standardising arguments
Lecture 3 12th Dec	Counterarguments; What are necessary and sufficient conditions?
Lecture 4 15th Dec	Necessary and sufficient conditions continued; conditional arguments and their validity
Lecture 5 17th Dec	Deductive arguments and inductive arguments
Lecture 6 19th Dec	Revision; In-Class test
Lecture 7 5th Jan	Inductive and statistical generalisations
Lecture 8 7th Jan	Inference to the best explanation; causal arguments
Lecture 9 9th Jan	Analogical arguments
Lecture 10 12th Jan	Clarifying arguments; language
Lecture 11 14th Jan	Broad standardisation
Lecture 12 16th Jan	Fallacies
Lecture 13 19th Jan	Evaluating longer arguments
Lecture 14 21st Jan	Using these skills in your own arguments

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central. Students should be aware of the following policies in particular with regard to

Learning and Teaching:

Academic Honesty Policy http://mq.edu.au/policy/docs/academic_honesty/policy.html

Assessment Policy http://mq.edu.au/policy/docs/assessment/policy.html

Grading Policy http://mq.edu.au/policy/docs/grading/policy.html

Grade Appeal Policy http://mq.edu.au/policy/docs/gradeappeal/policy.html

Grievance Management Policy http://mq.edu.au/policy/docs/grievance_management/policy.html

Disruption to Studies Policy http://www.mq.edu.au/policy/docs/disruption_studies/policy.html *The Disruption to Studies Policy is effective from March 3 2014 and replaces the Special Consideration Policy.*

In addition, a number of other policies can be found in the Learning and Teaching Category of Policy Central.

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/support/student_conduct/

To be eligible to pass this unit, students must gain at least 50 of the 100 marks on offer in the combined assessments of the unit. Students are expected to attend lectures and participate in discussions of unit materials; work through the unit website, which offers homework questions with answers and self assessment quizzes; and demonstrate an applied understanding of the unit material.

Final assignments are to be electronically submitted through the Turnitin link which can be found on the unit iLearn website: http://ilearn.mq.edu.au/

All requests for extensions must be made in writing to the convenor at least 24 hours prior to the due date of the assessment accompanied by supporting documentation. Email requests should include the unit code in the subject heading. Other work and study commitments will not be considered as reasonable grounds for granting an extension.

Student Support

Macquarie University provides a range of support services for students. For details, visit http://students.mq.edu.au/support/

Learning Skills

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study strategies to improve your marks and take control of your study.

- Workshops
- StudyWise

- Academic Integrity Module for Students
- Ask a Learning Adviser

Student Services and Support

Students with a disability are encouraged to contact the Disability Service who can provide appropriate help with any issues that arise during their studies.

Student Enquiries

For all student enquiries, visit Student Connect at ask.mq.edu.au

IT Help

For help with University computer systems and technology, visit http://informatics.mq.edu.au/help/.

When using the University's IT, you must adhere to the Acceptable Use Policy. The policy applies to all who connect to the MQ network including students.

Graduate Capabilities

Capable of Professional and Personal Judgement and Initiative

We want our graduates to have emotional intelligence and sound interpersonal skills and to demonstrate discernment and common sense in their professional and personal judgement. They will exercise initiative as needed. They will be capable of risk assessment, and be able to handle ambiguity and complexity, enabling them to be adaptable in diverse and changing environments.

This graduate capability is supported by:

Learning outcomes

- Learn to recognise the structure of arguments and represent that structure in a clear, standardised form
- Be able to identify different types of reasoning, such as deductive and inductive reasoning, and apply the methods of evaluation appropriate to each
- Apply your critical analysis skills to real arguments from a variety of contexts by recognising the generalisability of these skills and their applicability to other disciplines
- To develop critical analysis skills
- To develop problem-solving skills
- To develop creative thinking skills

Assessment tasks

- Final Written Assignment
- Online Quiz 1

- Online Quiz 2
- In-Class Test
- Mid-Session Assignment

Commitment to Continuous Learning

Our graduates will have enquiring minds and a literate curiosity which will lead them to pursue knowledge for its own sake. They will continue to pursue learning in their careers and as they participate in the world. They will be capable of reflecting on their experiences and relationships with others and the environment, learning from them, and growing - personally, professionally and socially.

This graduate capability is supported by:

Learning outcomes

- Learn to recognise the structure of arguments and represent that structure in a clear, standardised form
- Be able to identify different types of reasoning, such as deductive and inductive reasoning, and apply the methods of evaluation appropriate to each
- Apply your critical analysis skills to real arguments from a variety of contexts by recognising the generalisability of these skills and their applicability to other disciplines
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Discipline Specific Knowledge and Skills

Our graduates will take with them the intellectual development, depth and breadth of knowledge, scholarly understanding, and specific subject content in their chosen fields to make them competent and confident in their subject or profession. They will be able to demonstrate, where relevant, professional technical competence and meet professional standards. They will be able to articulate the structure of knowledge of their discipline, be able to adapt discipline-specific knowledge to novel situations, and be able to contribute from their discipline to inter-disciplinary solutions to problems.

This graduate capability is supported by:

Learning outcomes

- Learn to recognise the structure of arguments and represent that structure in a clear, standardised form
- Be able to identify different types of reasoning, such as deductive and inductive reasoning, and apply the methods of evaluation appropriate to each
- Apply your critical analysis skills to real arguments from a variety of contexts by recognising the generalisability of these skills and their applicability to other disciplines
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Critical, Analytical and Integrative Thinking

We want our graduates to be capable of reasoning, questioning and analysing, and to integrate and synthesise learning and knowledge from a range of sources and environments; to be able to critique constraints, assumptions and limitations; to be able to think independently and systemically in relation to scholarly activity, in the workplace, and in the world. We want them to have a level of scientific and information technology literacy.

This graduate capability is supported by:

Learning outcomes

- Learn to recognise the structure of arguments and represent that structure in a clear, standardised form
- Be able to identify different types of reasoning, such as deductive and inductive reasoning, and apply the methods of evaluation appropriate to each
- Apply your critical analysis skills to real arguments from a variety of contexts by recognising the generalisability of these skills and their applicability to other disciplines
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Problem Solving and Research Capability

Our graduates should be capable of researching; of analysing, and interpreting and assessing data and information in various forms; of drawing connections across fields of knowledge; and they should be able to relate their knowledge to complex situations at work or in the world, in order to diagnose and solve problems. We want them to have the confidence to take the initiative in doing so, within an awareness of their own limitations.

This graduate capability is supported by:

Learning outcomes

- Learn to recognise the structure of arguments and represent that structure in a clear, standardised form
- Be able to identify different types of reasoning, such as deductive and inductive reasoning, and apply the methods of evaluation appropriate to each
- Apply your critical analysis skills to real arguments from a variety of contexts by recognising the generalisability of these skills and their applicability to other disciplines
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Creative and Innovative

Our graduates will also be capable of creative thinking and of creating knowledge. They will be imaginative and open to experience and capable of innovation at work and in the community. We want them to be engaged in applying their critical, creative thinking.

This graduate capability is supported by:

Learning outcomes

- Be able to identify different types of reasoning, such as deductive and inductive reasoning, and apply the methods of evaluation appropriate to each
- Apply your critical analysis skills to real arguments from a variety of contexts by recognising the generalisability of these skills and their applicability to other disciplines
- To develop critical analysis skills
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Effective Communication

We want to develop in our students the ability to communicate and convey their views in forms effective with different audiences. We want our graduates to take with them the capability to read, listen, question, gather and evaluate information resources in a variety of formats, assess, write clearly, speak effectively, and to use visual communication and communication technologies as appropriate.

This graduate capability is supported by:

Learning outcomes

- Learn to recognise the structure of arguments and represent that structure in a clear, standardised form
- Be able to identify different types of reasoning, such as deductive and inductive reasoning, and apply the methods of evaluation appropriate to each
- Apply your critical analysis skills to real arguments from a variety of contexts by recognising the generalisability of these skills and their applicability to other disciplines
- To develop critical analysis skills
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Engaged and Ethical Local and Global citizens

As local citizens our graduates will be aware of indigenous perspectives and of the nation's historical context. They will be engaged with the challenges of contemporary society and with knowledge and ideas. We want our graduates to have respect for diversity, to be open-minded, sensitive to others and inclusive, and to be open to other cultures and perspectives: they should have a level of cultural literacy. Our graduates should be aware of disadvantage and social justice, and be willing to participate to help create a wiser and better society.

This graduate capability is supported by:

Learning outcomes

- Apply your critical analysis skills to real arguments from a variety of contexts by recognising the generalisability of these skills and their applicability to other disciplines
- To develop critical analysis skills
- To develop problem-solving skills
- To develop creative thinking skills

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Socially and Environmentally Active and Responsible

We want our graduates to be aware of and have respect for self and others; to be able to work with others as a leader and a team player; to have a sense of connectedness with others and country; and to have a sense of mutual obligation. Our graduates should be informed and active participants in moving society towards sustainability.

This graduate capability is supported by:

Learning outcomes

- Learn to recognise the structure of arguments and represent that structure in a clear, standardised form
- Apply your critical analysis skills to real arguments from a variety of contexts by recognising the generalisability of these skills and their applicability to other disciplines

- To develop critical analysis skills

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